Amendments to the Claims: This listing of claims will replace all prior versions, and listings, of claims in the application

Listing of Claims:

1. (Canceled)

2. (Currently Amended) The process according to claim 491, wherein P is a tetrahydropyranyl (THP) protecting group.

3. (Currently Amended) The process according to claim 491 or claim 2, wherein X is iodine.

4. (Currently Amended) The process according to claim 491, wherein A is $(CH_2)_2Ph$, ----- represents a double bond, P is THP and X is I.

5.-7. (Canceled)

8. (Currently Amended) The process according to claim 557, wherein P is a tetrahydropyranyl (THP) protecting group.

9. (Currently Amended) The process according to claim 557, wherein A is $(CH_2)_2Ph$, ----- represents a double bond and P is THP.

10.-12. (Canceled)

13. (Currently Amended) The process according to claim 5812, wherein P is a tetrahydropyranyl (THP) protecting group.

14. (Currently Amended) The process according to claim 5812, wherein A is $(CH_2)_2Ph$, ----- represents a double bond and P is THP.

15.-17. (Canceled)

18. (Currently Amended) The process according to claim 6117, wherein P is a tetrahydropyranyl (THP) protecting group.

19. (Currently Amended) The process according to claim 6117 or claim 18, wherein A is $(CH_2)_2Ph$ and ----- represents a double bond.

20.-22. (Canceled)

23. (Currently Amended) The process according to claim 2264, wherein P is a tetrahydropyranyl (THP) protecting group.

24. (Currently Amended) The process according to claim 2264, wherein A is $(CH_2)_2Ph$, P is THP, ----- represents a double bond, and compound (VIIa) reacts to give compound (VIa).

25. (Currently Amended) The process according to claim 2264, wherein A is $(CH_2)_2Ph$, P is THP, ----- represents a double bond, and compound (VIIb) reacts to give compound (VIb).

26. (Currently Amended) The process according to claim 2264, wherein A is $(CH_2)_2Ph$, ----- represents a double bond, and compound (VIIc) reacts to give compound (VIc).

27.-29. (Canceled)

30. (Currently Amended) The process according to claim 2967, wherein P is a tetrahydropyranyl (THP) protecting group.

31. (Currently Amended) The process according to claim ~~29~~67, wherein A is $(CH_2)_2Ph$, P is THP and compound (VIa) reacts to give compound (Va).

32. (Currently Amended) The process according to claim ~~29~~67, wherein A is $(CH_2)_2Ph$, P is THP and compound (VIb) reacts to give compound (Vb).

33. (Currently Amended) The process according to claim ~~29~~67, wherein A is $(CH_2)_2Ph$ and compound (VIc) reacts to give compound (Vc).

34. (Canceled)

35. (Currently Amended) The process according to claim ~~34~~70, wherein P is a tetrahydropyranyl (THP) protecting group.

36. (Currently Amended) The process according to claim ~~34~~70, wherein A is $(CH_2)_2Ph$, P is THP, ----- represents a single bond, and compound (Va) reacts to give compound (IVa).

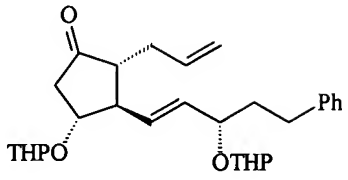
37. (Currently Amended) The process according to claim ~~34~~70, wherein A is $(CH_2)_2Ph$, P is THP, ----- represents a single bond, and compound (Vb) reacts to give compound (IVb).

38. (Currently Amended) The process according to claim ~~34~~70, wherein A is $(CH_2)_2Ph$, ----- represents a single bond, and compound (Vc) reacts to give compound (IVc).

39.-40. (Canceled)

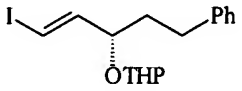
41. (Original) A process for synthesising Latanoprost comprising the steps of:

a) preparing a compound of formula (3):



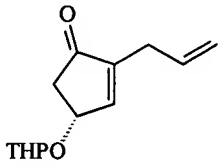
(3)

said preparing comprising converting a compound of formula (1):



(1)

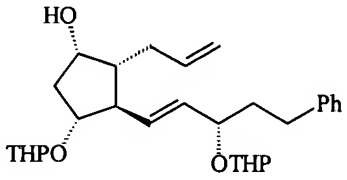
to a cuprate reagent and performing a 1,4 addition reaction between the cuprate reagent and a compound of formula (2):



(2)

;

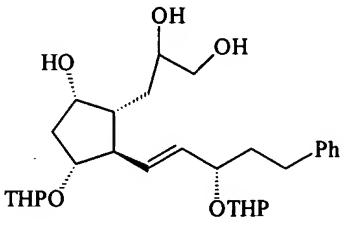
b) selectively reducing the compound of formula (3) to provide a compound of formula (4):



(4)

;

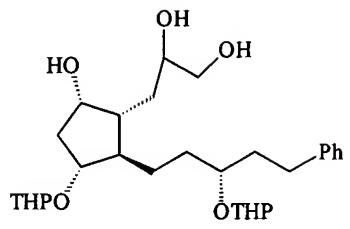
c) dihydroxylating the compound of formula (4) to provide a compound of formula (7):



(7)

;

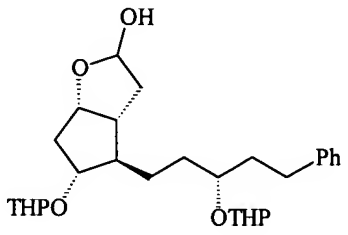
d) reducing the compound of formula (7) to provide a compound of formula (10):



(10)

;

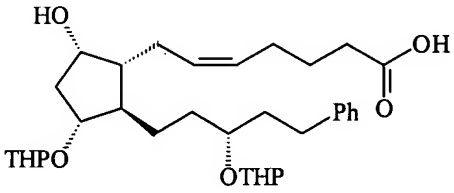
e) performing a diol cleavage reaction on the compound of formula (10) to provide a compound formula (13):



(13)

;

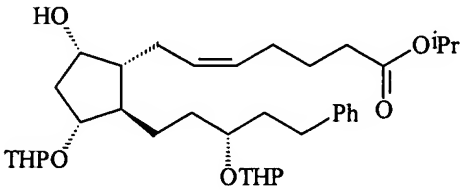
f) performing a Wittig reaction on the compound of formula (13) to provide a compound of formula (16):



(16)

;

g) esterifying the compound of formula (16) to provide a compound of formula (19):

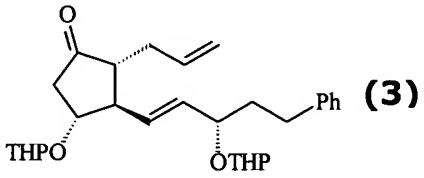


(19); and

h) deprotecting the compound of formula (19) to provide Latanoprost.

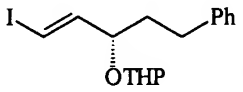
42. (Currently Amended) A process for synthesising Latanoprost comprising the steps of:

a) preparing a compound of formula (3):



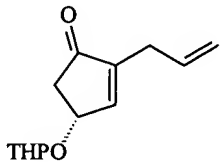
(3)

said preparing comprising converting a compound of formula (1):



(1)

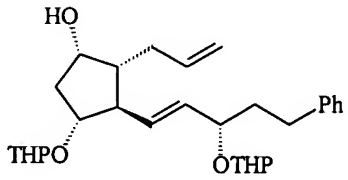
to a cuprate reagent and performing a 1,4 addition reaction between the cuprate reagent and a compound of formula (2):



(2)

;

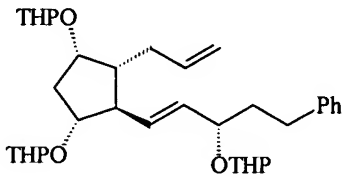
b) selectively reducing the compound of formula (3) to provide a compound of formula (4):



(4)

;

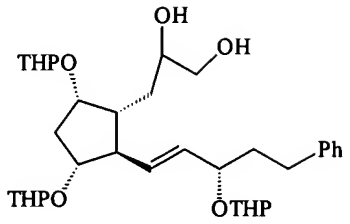
c) protecting the compound of formula (4) to provide a compound of formula (5):



(5)

;

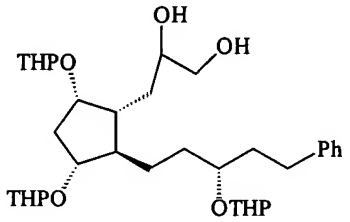
d) dihydroxylating the compound of formula (5) to provide a compound of formula (8):



(8)

;

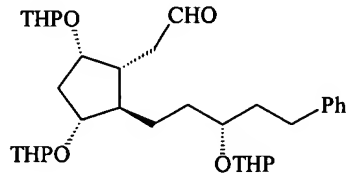
e) reducing the compound of formula (8) to provide a compound of formula (11):



(11)

;

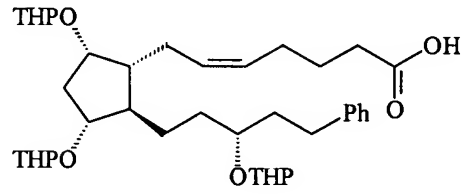
f) performing a diol cleavage reaction on the compound of formula (11) to provide a compound of formula (14):



(14)

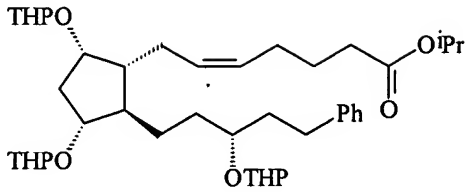
;

g) performing a ~~Witting~~ Wittig reaction on the compound of formula (14) to provide a compound of formula (17):



(17);

h) esterifying the compound of formula (17) to provide a compound of formula (20):

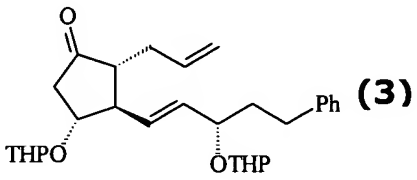


(20); and

i) deprotecting the compound of formula (20) to provide Latanoprost.

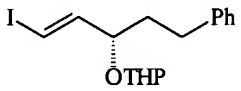
43. (Original) A process for synthesising Latanoprost comprising the steps of:

a) preparing a compound of formula (3):



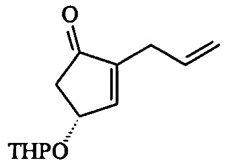
(3)

said preparing comprising converting a compound of formula (1):



(1)

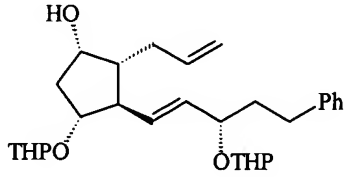
to a cuprate reagent and performing a 1,4 addition reaction between the cuprate reagent and a compound of formula (2):



(2)

;

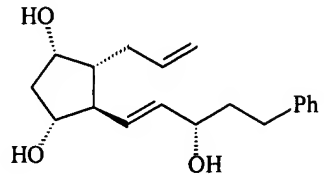
b) selectively reducing the compound of formula (3) to provide a compound of formula (4):



(4)

;

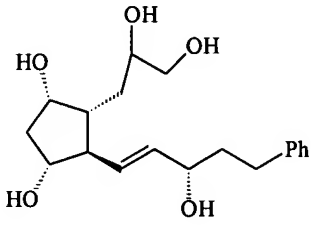
c) deprotecting the compound of formula (4) to provide a compound of formula (6):



(6)

;

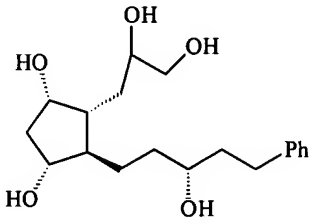
d) dihydroxylating the compound of formula (6) to provide a compound of formula (9):



(9)

;

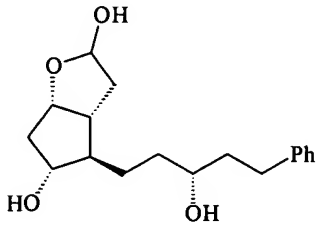
e) reducing the compound of formula (9) to provide a compound of formula (12):



(12)

;

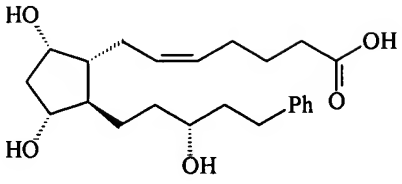
f) performing a diol cleavage reaction on the compound of formula (12) to provide a compound of formula (15):



(15)

;

g) performing a Wittig reaction on the compound of formula (15) to provide a compound of formula (18):



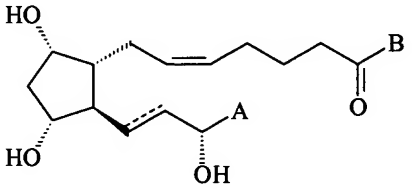
(18)

; and

h) esterifying the compound of formula (18) to provide Latanoprost.

44.-48. (Canceled)

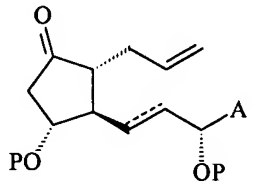
49. (New) A process for the preparation of a prostaglandin compound having the formula (I):



(I)

wherein A is selected from the group consisting of C_1-C_6 alkyl groups; C_7-C_{16} aralkyl groups wherein an aryl portion thereof is unsubstituted or substituted with one to three substituents selected from the group consisting of C_1-C_6 alkyl groups, halo and CF_3; and $(CH_2)_nOR'$ wherein n is an integer from 1 to 3 and R' represents a C_6-C_{10} aryl group which is unsubstituted or substituted with one to three substituents selected from the group consisting of C_1-C_6 alkyl groups, halo and CF_3; B is selected from OR" and NHR" wherein R" is C_1-C_6 alkyl groups; and ===== represents a double bond or a single bond;

the process comprising a step of preparing a compound of formula (VIII):

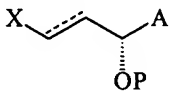


(VIII)

wherein A is selected from the group consisting of C_1-C_6 alkyl groups; C_7-C_{16} aralkyl groups wherein an aryl portion thereof is unsubstituted or substituted with one to three substituents selected

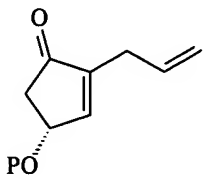
from the group consisting of C_1-C_6 alkyl groups, halo and CF_3; and $(CH_2)_nOR'$ wherein n is an integer from 1 to 3 and R' represents a C_6-C_{10} aryl group which is unsubstituted or substituted with one to three substituents selected from the group consisting of C_1-C_6 alkyl groups, halo and CF_3; P is a hydroxyl protecting group; and ----- represents a double bond or a single bond;

said step comprising converting a compound of formula (IX):



(IX)

wherein A, P and ----- are as defined above and X is a leaving group, to a cuprate reagent and performing a 1,4 addition reaction between the cuprate reagent and a compound of formula (X):



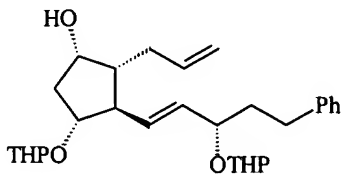
(X)

wherein P is as defined above.

50. (New) The process according to claim 2, wherein the compound having the formula (I) is Travoprost.

51. (New) The process according to claim 49, wherein the compound having the formula (I) is Travoprost.

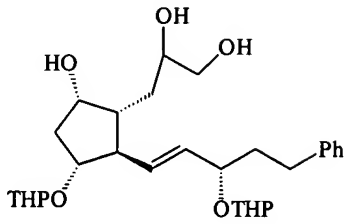
52. (New) The process according to claim 49, wherein A is CH_2CH_2-Ph, ----- represents a double bond and P is THP, the process further comprising selectively reducing the compound of formula (VIII) to provide a compound of formula (4):



(4)

;

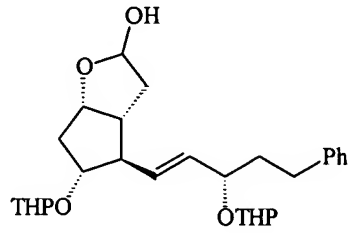
dihydroxylating the compound of formula (4) to provide a compound of formula (7):



(7)

;

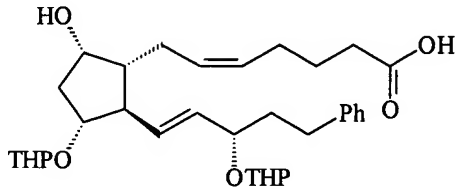
performing a diol cleavage reaction on the compound of formula (7) to provide a compound of formula (23):



(23)

;

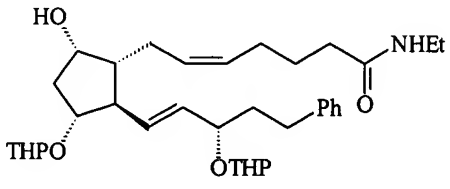
performing a Wittig reaction on the compound of formula (23) to provide a compound of formula (26):



(26)

;

amidating the compound of formula (26) to provide a compound of formula (29):

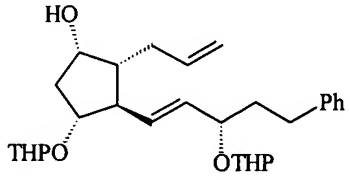


(29)

; and

deprotecting the compound of formula (29) to provide Bimatoprost.

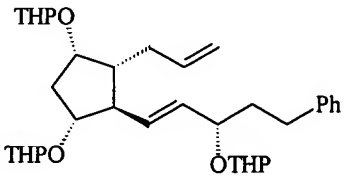
53. (New) The process according to claim 49, wherein A is CH_2CH_2-Ph, ===== represents a double bond and P is THP, the process further comprising selectively reducing the compound of formula (VIII) to provide a compound of formula (4):



(4)

;

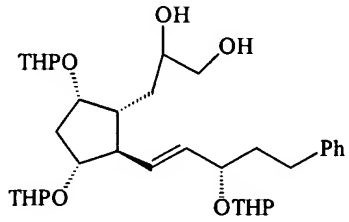
protecting the compound of formula (4) to provide a compound of formula (5):



(5)

;

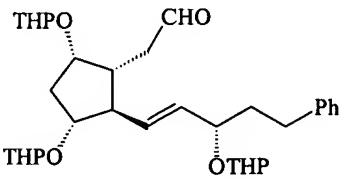
dihydroxylating the compound of formula (5) to provide a compound of formula (8):



(8)

;

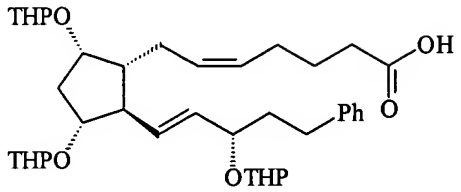
performing a diol cleavage reaction on the compound of formula (8) to provide a compound of formula (24):



(24)

;

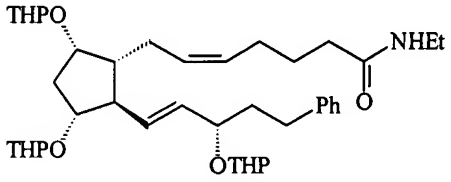
performing a Wittig reaction on the compound of formula (24) to provide a compound of formula (27):



(27)

;

amidating the compound of formula (27) to provide a compound of formula (30):

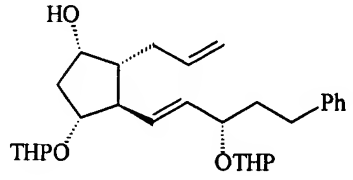


(30)

; and

deprotecting the compound of formula (30) to provide Bimatoprost.

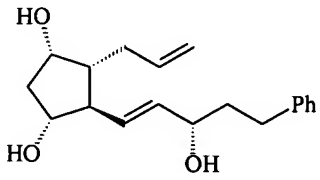
54. (New) The process according to claim 49, wherein A is CH_2CH_2-Ph, ===== represents a double bond and P is THP, the process further comprising selectively reducing the compound of formula (VIII) to provide a compound of formula (4):



(4)

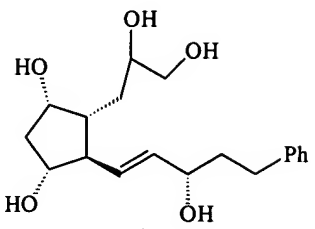
;

deprotecting the compound of formula (4) to provide a compound of formula (6):



;

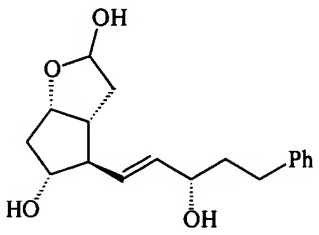
dihydroxylating the compound of formula (6) to provide a compound of formula (9):



(9)

;

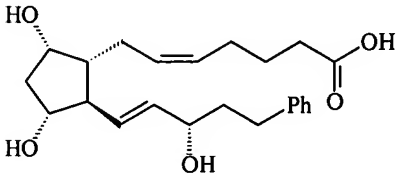
performing a diol cleavage on the compound of formula (9) to provide a compound of formula (25):



(25)

;

performing a Wittig reaction on the compound of formula (25) to provide a compound of formula (28):

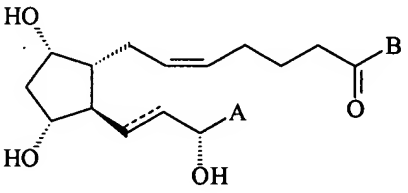


(28)

; and

amidating the compound of formula (28) to provide Bimatoprost.

55. (New) A process for the preparation of a prostaglandin compound having the formula (I):

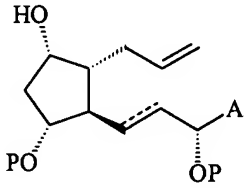


(I)

wherein A is selected from the group consisting of C_1-C_6 alkyl groups; C_7-C_{16} aralkyl groups wherein an aryl portion thereof is unsubstituted or substituted with one to three substituents selected

from the group consisting of C_1-C_6 alkyl groups, halo and CF_3; and $(CH_2)_nOR'$ wherein n is an integer from 1 to 3 and R' represents a C_6-C_{10} aryl group which is unsubstituted or substituted with one to three substituents selected from the group consisting of C_1-C_6 alkyl groups, halo and CF_3; B is selected from OR" and NHR" wherein R" is C_1-C_6 alkyl groups; and ----- represents a double bond or a single bond;

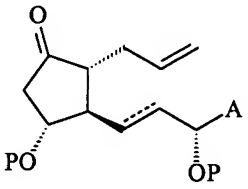
the process comprising a step of preparing a compound of formula (VIIa):



(VIIa)

wherein A is selected from the group consisting of C_1-C_6 alkyl groups; C_7-C_{16} aralkyl groups wherein an aryl portion thereof is unsubstituted or substituted with one to three substituents selected from the group consisting of C_1-C_6 alkyl groups, halo and CF_3; and $(CH_2)_nOR'$ wherein n is an integer from 1 to 3 and R' represents a C_6-C_{10} aryl group which is unsubstituted or substituted with one to three substituents selected from the group consisting of C_1-C_6 alkyl groups, halo and CF_3; P is a hydroxyl protecting group and ----- represents a double bond or a single bond;

said step comprising selectively reducing a compound of formula (VIII):



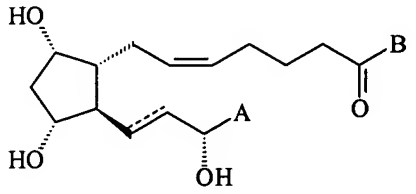
(VIII)

wherein A, P and ----- are as defined above.

56. (New) The process according to claim 8, wherein the compound having the formula (I) is Travoprost.

57. (New) The process according to claim 55, wherein the compound having the formula (I) is Travoprost.

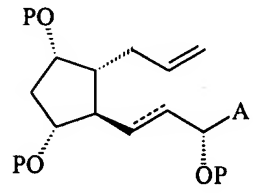
58. (New) A process for the preparation of a prostaglandin compound having the formula (I):



(I)

wherein A is selected from the group consisting of C_1-C_6 alkyl groups; C_7-C_{16} aralkyl groups wherein an aryl portion thereof is unsubstituted or substituted with one to three substituents selected from the group consisting of C_1-C_6 alkyl groups, halo and CF_3; and $(CH_2)_nOR'$ wherein n is an integer from 1 to 3 and R' represents a C_6-C_{10} aryl group which is unsubstituted or substituted with one to three substituents selected from the group consisting of C_1-C_6 alkyl groups, halo and CF_3; B is selected from OR" and NHR" wherein R" is C_1-C_6 alkyl groups; and ----- represents a double bond or a single bond;

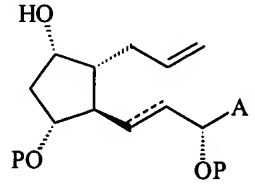
the process comprising a step of preparing a compound of formula (VIIb):



(VIIb)

wherein A is selected from the group consisting of C_1-C_6 alkyl groups; C_7-C_{16} aralkyl groups wherein an aryl portion thereof is unsubstituted or substituted with one to three substituents selected from the group consisting of C_1-C_6 alkyl groups, halo and CF_3; and $(CH_2)_nOR'$ wherein n is an integer from 1 to 3 and R' represents a C_6-C_{10} aryl group which is unsubstituted or substituted with one to three substituents selected from the group consisting of C_1-C_6 alkyl groups, halo and CF_3; P is a hydroxyl protecting group and ----- represents a double bond or a single bond;

said step comprising protecting a compound of formula (VIIa):



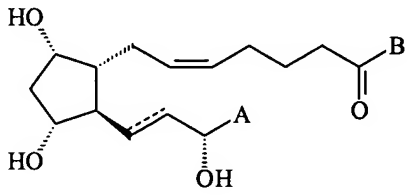
(VIIa)

wherein A, P and ----- are as defined above, with a hydroxyl protecting group.

59. (New) The process according to claim 13, wherein the compound having the formula (I) is Travoprost.

60. (New) The process according to claim 58, wherein the compound having the formula (I) is Travoprost.

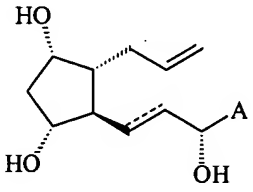
61. (New) A process for the preparation of a prostaglandin compound having the formula (I):



(I)

wherein A is selected from the group consisting of C_1-C_6 alkyl groups; C_7-C_{16} aralkyl groups wherein an aryl portion thereof is unsubstituted or substituted with one to three substituents selected from the group consisting of C_1-C_6 alkyl groups, halo and CF_3; and $(CH_2)_nOR'$ wherein n is an integer from 1 to 3 and R' represents a C_6-C_{10} aryl group which is unsubstituted or substituted with one to three substituents selected from the group consisting of C_1-C_6 alkyl groups, halo and CF_3; B is selected from OR" and NHR" wherein R" is C_1-C_6 alkyl groups; and ----- represents a double bond or a single bond;

the process comprising a step of preparing a compound of formula (VIIc):

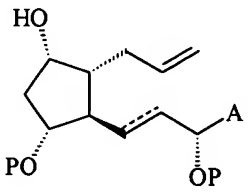


(VIIc)

wherein A is selected from the group consisting of C_1-C_6 alkyl groups; C_7-C_{16} aralkyl groups wherein an aryl portion thereof is unsubstituted or substituted with one to three substituents selected from the group consisting of C_1-C_6 alkyl groups, halo and CF_3; and $(CH_2)_nOR'$ wherein n is an integer from 1 to 3 and R' represents a C_6-C_{10} aryl group which is unsubstituted or substituted with

one to three substituents selected from the group consisting of C_1-C_6 alkyl groups, halo and CF_3 and ----- represents a double bond or a single bond;

said step comprising deprotecting a compound of formula (VIIa):



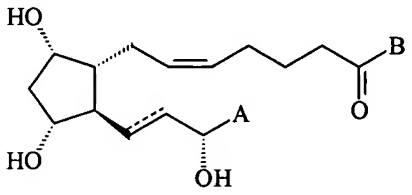
(VIIa)

wherein A and ----- are as defined above and P is a protecting group.

62. (New) The process according to claim 18, wherein the compound having the formula (I) is Travoprost.

63. (New) The process according to claim 61, wherein the compound having the formula (I) is Travoprost.

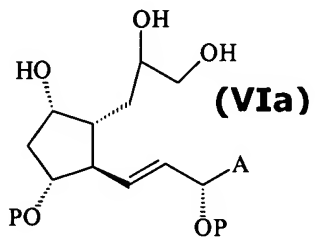
64. (New) A process for the preparation of a prostaglandin compound having the formula (I):

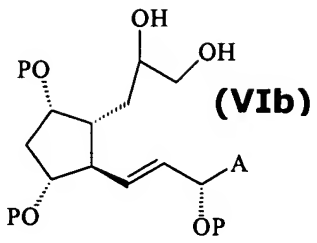


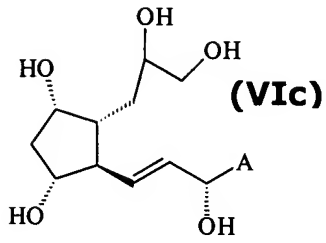
(I)

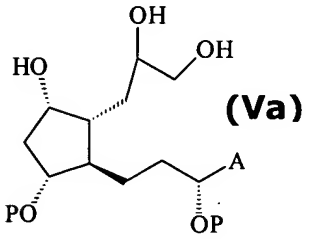
wherein A is selected from the group consisting of C_1-C_6 alkyl groups; C_7-C_{16} aralkyl groups wherein an aryl portion thereof is unsubstituted or substituted with one to three substituents selected from the group consisting of C_1-C_6 alkyl groups, halo and CF_3; and $(CH_2)_nOR'$ wherein n is an integer from 1 to 3 and R' represents a C_6-C_{10} aryl group which is unsubstituted or substituted with one to three substituents selected from the group consisting of C_1-C_6 alkyl groups, halo and CF_3; B is selected from OR" and NHR" wherein R" is C_1-C_6 alkyl groups; and ----- represents a double bond or a single bond;

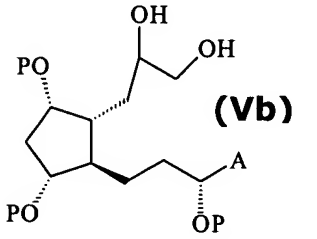
the process comprising a step of preparing a compound of formula (VIa), (VIb), (VIc), (Va), (Vb) or (Vc):

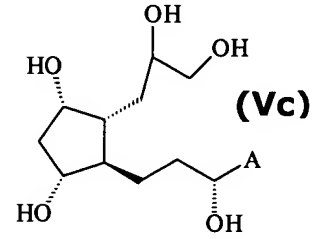






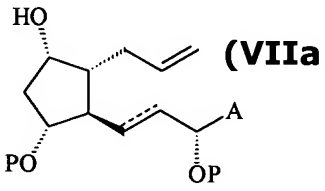


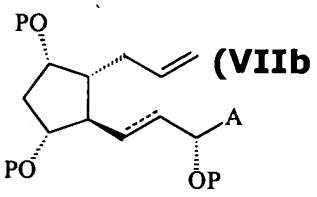


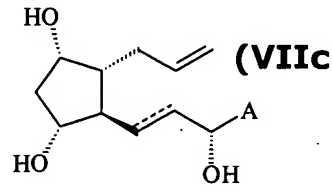


wherein A is selected from the group consisting of C_1-C_6 alkyl groups; C_7-C_{16} aralkyl groups wherein an aryl portion thereof is unsubstituted or substituted with one to three substituents selected from the group consisting of C_1-C_6 alkyl groups, halo and CF_3; and $(CH_2)_nOR'$ wherein n is an integer from 1 to 3 and R' represents a C_6-C_{10} aryl group which is unsubstituted or substituted with one to three substituents selected from the group consisting of C_1-C_6 alkyl groups, halo and CF_3; and P is a hydroxyl protecting group;

said step comprising dihydroxylating a compound of formula (VIIa), a compound of formula (VIIb) or a compound of formula (VIIc):





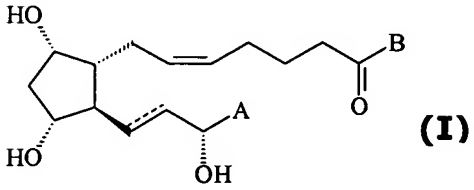


wherein A and P are as defined above and ----- is a double or single bond.

65. (New) The process according to claim 23, wherein the compound having the formula (I) is Travoprost.

66. (New) The process according to claim 64, wherein the compound having the formula (I) is Travoprost.

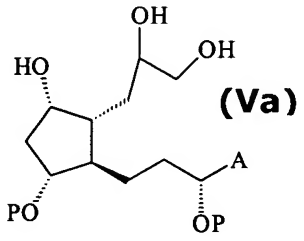
67. (New) A process for the preparation of a prostaglandin compound having the formula (I):



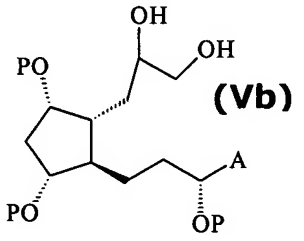
(I)

wherein A is selected from the group consisting of C_1-C_6 alkyl groups; C_7-C_{16} aralkyl groups wherein an aryl portion thereof is unsubstituted or substituted with one to three substituents selected from the group consisting of C_1-C_6 alkyl groups, halo and CF_3; and $(CH_2)_nOR'$ wherein n is an integer from 1 to 3 and R' represents a C_6-C_{10} aryl group which is unsubstituted or substituted with one to three substituents selected from the group consisting of C_1-C_6 alkyl groups, halo and CF_3; B is selected from OR" and NHR" wherein R" is C_1-C_6 alkyl groups; and ----- represents a double bond or a single bond;

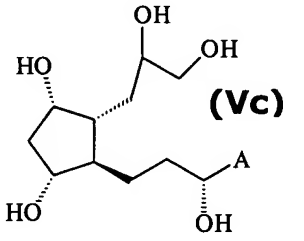
the process comprising a step of preparing a compound of formula (Va), (Vb) or (Vc):



(Va)



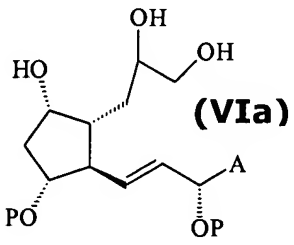
(Vb)



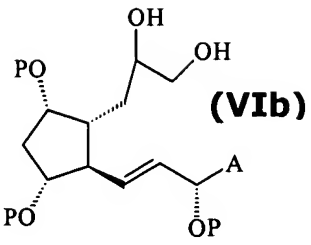
(Vc)

wherein A is selected from the group consisting of C_1-C_6 alkyl groups; C_7-C_{16} aralkyl groups wherein an aryl portion thereof is unsubstituted or substituted with one to three substituents selected from the group consisting of C_1-C_6 alkyl groups, halo and CF_3; and $(CH_2)_nOR'$ wherein n is an integer from 1 to 3 and R' represents a C_6-C_{10} aryl group which is unsubstituted or substituted with one to three substituents selected from the group consisting of C_1-C_6 alkyl groups, halo and CF_3; and P is a hydroxyl protecting group;

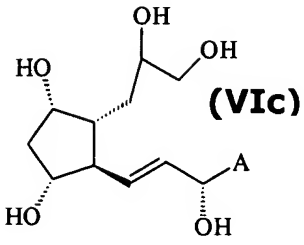
said step comprising reducing a double bond of a compound of formula (VIa), a compound of formula (VIb) or a compound of formula (VIc):



(VIa)



(VIb)



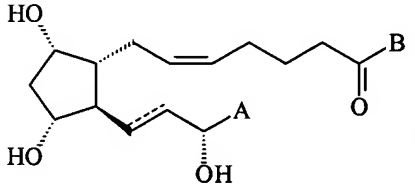
(VIc)

wherein A and P are as defined above.

68. (New) The process according to claim 30, wherein the compound having the formula (I) is Travoprost.

69. (New) The process according to claim 67, wherein the compound having the formula (I) is Travoprost.

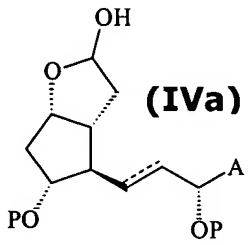
70. (New) A process for the preparation of a prostaglandin compound having the formula (I):



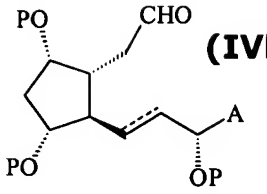
(I)

wherein A is selected from the group consisting of C_1-C_6 alkyl groups; C_7-C_{16} aralkyl groups wherein an aryl portion thereof is unsubstituted or substituted with one to three substituents selected from the group consisting of C_1-C_6 alkyl groups, halo and CF_3; and $(CH_2)_nOR'$ wherein n is an integer from 1 to 3 and R' represents a C_6-C_{10} aryl group which is unsubstituted or substituted with one to three substituents selected from the group consisting of C_1-C_6 alkyl groups, halo and CF_3; B is selected from OR" and NHR" wherein R" is C_1-C_6 alkyl groups; and ----- represents a double bond or a single bond;

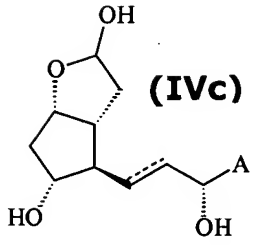
the process comprising a step of preparing a compound of formula (IVa), (IVb) or (IVc):



(IVa)



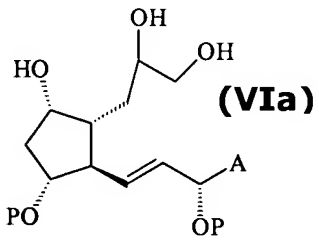
(IVb)



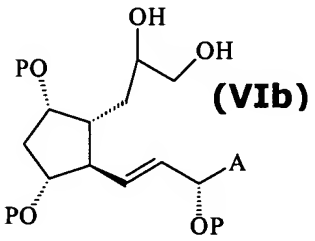
(IVc)

wherein A is selected from the group consisting of C_1-C_6 alkyl groups; C_7-C_{16} aralkyl groups wherein an aryl portion thereof is unsubstituted or substituted with one to three substituents selected from the group consisting of C_1-C_6 alkyl groups, halo and CF_3; and $(CH_2)_nOR'$ wherein n is an integer from 1 to 3 and R' represents a C_6-C_{10} aryl group which is unsubstituted or substituted with one to three substituents selected from the group consisting of C_1-C_6 alkyl groups, halo and CF_3; P is a hydroxyl protecting group and ----- represents a double bond or a single bond;

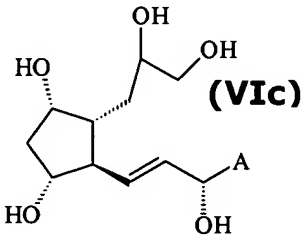
said step comprising performing a diol cleavage reaction on a compound of formula (VIa), (Va), (VIb), (Vb), (VIc) or (Vc):



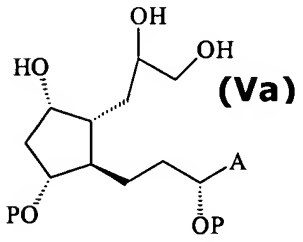
(VIa)



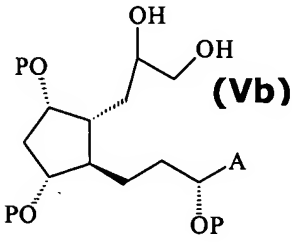
(VIb)



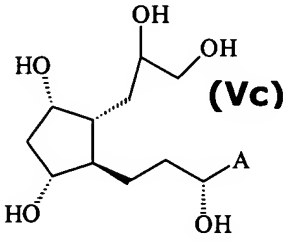
(VIc)



(Va)



(Vb)



(Vc)

wherein A and P are as defined above.

71. (New) The process according to claim 35, wherein the compound having the formula (I) is Travoprost.

72. (New) The process according to claim 70, wherein the compound having the formula (I) is Travoprost.